



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

**MAR 01 2017**

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Robert F. Burke, III  
Senior Environmental Engineer  
Ascend Performance Materials LLC  
1050 Chemstrand Avenue  
Decatur, Alabama 35601

SUBJ: Opportunity to Show Cause  
Resource Conservation and Recovery Act (RCRA) Compliance Evaluation Inspection (CEI)  
Ascend Performance Materials LLC  
EPA ID Number: ALD006320774

Dear Mr. Burke:

On October 18-19, 2016, the U.S. Environmental Protection Agency, along with Alabama Department of Environmental Management (ADEM), conducted a RCRA CEI at the Ascend Performance Materials LLC located at 1050 Chemstrand Avenue in Decatur, Alabama to determine the facility's compliance status with RCRA and applicable regulations. This RCRA CEI was an EPA lead inspection.

The EPA has determined that the facility may not be in compliance with several requirements of the Alabama Hazardous Waste Management and Minimization Act of 1978 (AHWMMA), Ala. Code § 22-30-1 *et seq.* (Subtitle C of RCRA, 42 U.S.C. §§ 6921 to 6939e), and the regulations promulgated pursuant thereto and set forth at the Rules 335-14-1 to 335-14-17 of the Alabama Department of Environmental Management (ADEM) Administrative Code (ADEM Admin. Code) (40 C.F.R. Parts 260 through 279) based on potential deficiencies observed during the CEI. The observations made during the inspection are summarized in the attached RCRA CEI Report.

The facility is also being offered the opportunity to meet with the EPA at its regional office located at the Sam Nunn Atlanta Federal Center, 61 Forsyth Street SW, Atlanta, Georgia, 30303, or by teleconference, to show cause why the EPA should not take formal enforcement action against the Ascend Performance Materials LLC pursuant to Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), relating to the observations and findings of the inspection. Ascend Performance Materials LLC may elect to be represented by legal counsel at this meeting and should be prepared to present relevant information and documentation pertaining to the EPA's observed deficiencies.

The EPA may determine that a formal enforcement action is appropriate and may assess civil penalties pursuant to Section 3008(a) of RCRA, 42 U.S.C. § 6928(a). Therefore, Ascend Performance Materials LLC has the opportunity to present factors and documentation that could mitigate any penalties that may be assessed against the facility, including information on Ascend Performance Materials LLC's ability to pay a penalty. Prior to the meeting, Ascend Performance Materials LLC may review the RCRA Civil Penalty Policy found at:

<http://www2.epa.gov/sites/production/files/documents/rcpp2003-fnl.pdf>,  
and the revised penalty matrices found at:  
<http://www2.epa.gov/sites/production/files/documents/revisionpenaltypolicy04910.pdf>.

Please be advised that any information provided by Ascend Performance Materials LLC at the meeting may be used by the EPA in any civil or criminal proceedings related to this or other matters. Any false, fictitious, or fraudulent material omissions, statements, or representations may subject Ascend Performance Materials LLC to criminal penalties under Section 3008(d)(3) of RCRA, 42 U.S.C. § 6928(d)(3).

If Ascend Performance Materials LLC chooses to accept this offer to meet with the EPA, the facility should contact Paula A. Whiting within fourteen (14) days following receipt of this letter to schedule a meeting or conference call. Ms. Whiting can be reached at (404) 562-9277 or by email at [whiting.paula@epa.gov](mailto:whiting.paula@epa.gov). If you decide not to accept this offer to meet to discuss the observed deficiencies, the EPA may proceed with enforcement action against the Ascend Performance Materials LLC as authorized under Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), including the assessment of appropriate civil penalties and injunctive relief.

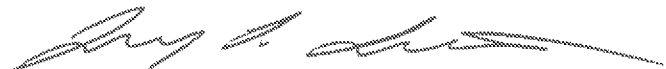
If your facility is a Small Business or a Small Community, you can find compliance and enforcement resources specifically designed to meet your needs at:

<http://www2.epa.gov/enforcement/small-businesses-and-enforcement>.

In that webpage you can also find information about the Small Business Regulatory Enforcement Fairness Act (SBREFA) that accords some right to small business and is aimed at providing assistance to small businesses and other small entities, making tools available for better understanding of the regulatory and enforcement processes, and seeing that there is no unfair treatment relating to the regulatory enforcement process.

Please feel free to contact Ms. Paula Whiting if you have any technical questions regarding the observations and findings from the inspection performed at Ascend Performance Materials LLC's facility.

Sincerely,



Larry L. Lamberth  
Chief, Enforcement and Compliance Branch  
Resource Conservation and Restoration Division

Enclosure

cc: Bailee Dykes, Industrial Hazardous Waste Program, ADEM Land Division



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MAR 01 2017

Vernon H. Crockett  
Chief, Industrial Hazardous Waste Branch  
Land Division  
Alabama Department of Environmental Management  
1400 Coliseum Boulevard  
Montgomery, Alabama 36110-2059

SUBJ: RCRA Compliance Evaluation Inspection  
Ascend Performance Materials LLC  
EPA ID Number: ALD006320774

Dear Mr. Crockett:

On October 18-19, 2016, a U.S. Environmental Protection Agency compliance evaluation inspection was conducted at Ascend Performance Materials LLC, located in Decatur, Alabama, to determine the facility's compliance status with the Resource Conservation and Recovery Act (RCRA).

Apparent violations of RCRA were discovered. Based on the findings of the inspection, the EPA considers this facility to be a Significant Non-Complier.

Enclosed is a copy of the EPA inspection report. If you have any questions regarding this matter, please contact Paula Whiting, of my personnel, by phone at (404) 562-9277 or by email at [whiting.paula@epa.gov](mailto:whiting.paula@epa.gov).

Sincerely,

A handwritten signature in cursive script, reading "Alan A. Annicella", is positioned above the typed name and title.

Alan A. Annicella  
Chief, Hazardous Waste Enforcement and  
Compliance Section  
Enforcement and Compliance Branch  
Resource Conservation and Restoration Division

Enclosure

## RCRA Inspection Report

### 1) Inspector and Author of Report

Paula A. Whiting  
Environmental Engineer  
U.S. Environmental Protection Agency, Region 4  
Hazardous Waste Enforcement and Compliance Section  
Enforcement and Compliance Branch  
Resource Conservation and Restoration Division  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303  
(404) 562-9277

### 2) Facility Information

Ascend Performance Materials LLC  
1050 Chemstrand Avenue  
Decatur, Alabama 35601  
Morgan County  
EPA ID: ALD006320774

### 3) Responsible Official

Bob Burke  
Senior Environmental Engineer  
Ascend Performance Materials LLC  
1050 Chemstrand Avenue  
Decatur, Alabama 32653

### 4) Inspection Participants

|                 |                                  |
|-----------------|----------------------------------|
| Bob Burke       | Ascend Performance Materials LLC |
| Angela Jenkins  | Ascend Performance Materials LLC |
| Bailee Dykes    | ADEM Land Division               |
| Marlon McMillan | ADEM Land Division               |
| Chris Griffith  | ADEM Land Division               |
| Mike Neill      | US EPA Region 4 SEDS             |
| Art Masters     | US EPA Region 4 SEDS             |
| Parvez Mallick  | US EPA Region 4 Atlanta          |
| Paula Whiting   | US EPA Region 4 Atlanta          |

### 5) Date and Time of Inspection

October 18-19, 2016 at 9:30 a.m. CDT



## 6) Applicable Regulations

Resource Conservation and Recovery Act (RCRA) Sections 3002, 3005 and 3007 (42 U.S.C. §§ 6922, 6925 and 6927), and the regulations promulgated pursuant thereto at 40 Code of Federal Regulations (C.F.R.) Parts 260-270, 273 and 279.

ADEM Administrative Code 335 Division 14

## 7) Purpose of Inspection

The purpose of the inspection was to conduct an unannounced RCRA compliance evaluation inspection (CEI) to determine the compliance of Ascend Performance Materials LLC, EPA ID# ALD006320774 with the applicable regulations.

## 8) Facility Description

The Ascend Performance Materials LLC (Ascend or facility), Decatur, Alabama was formerly known as Chemstrand, then Monsanto and then Solutia Inc., until the facility was purchased in 2009. Ascend is a manufacturer of polyamide raw white and solution dyed fibers and filaments for textile and carpet yarn applications. Ascend's Decatur facility produces intermediate organic chemicals used to produce nylon fiber and coke. Adiponitrile (ADN) and hexamethylenediamine (HMD) are the primary organic chemicals manufactured at the Decatur facility.

### ADN Process

This process produces refined ADN from acrylonitrile (AN). AN and an electrolyte is fed to an electrohydrodimerization reaction system. The product of the reaction system is a mixture of liquid and gas phases. The organic liquid phase is decanted and pumped forward for raw material recovery and product purification (liquid/liquid extraction and distillation). The electrolyte is processed for electrolyte recovery and metals removal (ion exchange, steam stripping and evaporation) and solids removal (precipitation, centrifugation) processing units. ADN is used within several scrubbers to control air emissions as required in the facility's Title V Permit. Refined ADN is used onsite in the HMD process and shipped offsite.

### HMD Process

This process converts ADN to HMD in a hydrogenation reaction unit. A portion of the hydrogen used in the HMD process is synthesized on-site in methane reformers. The other hydrogen is produced by the Linde Hydrogen Plant. The crude HMD is refined to high purity HMD in a distillation train. Specialty chemical streams are produced and sold from the HMD purification process.

### Tetrabutylhexamethylenediamine (TBMHD) Process

HMD and butyraldehyde (BuO) are batch-reacted with hydrogen to produce TBHMD. TBHMD is a precursor for a directional salt used in the ADN synthesis process. The TBHMD is decanted and filtered for both in-plant use and sales.

These products are then shipped to either the Florida or South Carolina Ascend facility or outside customers.

#### Quaternary Ammonium (QA Process)

The QA process is a batch process that produces a directive salt for the AN Manufacturing Area. Diethyl sulfate (DES) and tetrabutyl hexamethylene diamine are reacted in the Salt Strike Reactor to form quaternary ammonium ethyl sulfate (QAES). Diluted QAES is then fed through an ion exchange bed to produce the directive salt.

In addition to the organic chemical manufacturing units, the facility operates several utilities that support the manufacturing. These utilities include: coal-fired boilers, aqueous waste water treatment, chilled water, city water supply and nitrogen supply.

#### Hydrogen Reformers

The hydrogen used in the HMD process currently comes from two hydrogen plants and two Linde hydrogen plants. The hydrogen is produced by reacting natural gas and steam in a reformer at high temperature and pressure. The reactants then go through high and low temperature shift conversions to drive the reaction forward.

After the low temperature shift, the water in the product is removed through condensate separators. The product gas then goes through a pressure swing adsorption (PSA) purification unit and prism separators to separate out the carbon dioxide. Finally, hydrogen compressors are used to send high purity hydrogen to the low pressure diamine (LPD) reactor.

#### Boilers

Three boilers are operated on-site to generate steam. Boilers 5 and 6 are traditional traveling grate spreader stokers using medium sulfur coal. The largest boiler, boiler 7, is a natural gas fired design along with byproduct streams from the Nylon Manufacturing Area. The byproduct streams burned in boiler 7 include propionitrile vapors, adiponitrile flasher tails (AFT), amine heads, and low boiler make.

#### Cokers

Two cokers are operated on-site for the production of "coke" which is sold for use in metallurgical processes. Coal is fed onto a grate. The volatile components of the coal are driven off and burned in the combustion chamber. The remaining carbon-rich solid portion of the coal is removed and cooled. This material, which is known as "coke," is the primary marketable product of the cokers. The cokers recover the resultant heat from combustion of the volatile components of the coal by generating steam in a series of water tubes, which are located above the combustion chamber. Steam produced from each unit is a secondary objective and uses waste heat from the coking process.

#### Aqueous Wastewater Treatment Plant (AWTP)

The AWTP processes aqueous waste streams from the manufacturing areas, as well as sanitary sewage. The plant consists of a biological treatment process including nitrification/denitrification. Treated effluent is discharged to the Tennessee River under an NPDES Permit issued by ADEM.

The Ascend facility is situated on 650 acres of land with 100 acres used in production. The facility currently has 257 permanent employees and 100 resident contractors working four 8-hour shifts, 24 hours a day, seven days a week.

On February 16, 2016, Ascend most notified ADEM that they are a large quantity generator (LQG) of hazardous waste.

Currently Ascend may generate hazardous waste streams, used oil and universal wastes (such as spent batteries and certain types of lamps), waste solvent, spent aerosol cans, paint waste and other wastes which include EPA Waste Codes D001, D002, D003, D006, D008, D009, D035, F002, F003, and U009.

## **9) Previous Inspection History**

This facility was last inspected on September 6, 2016 by ADEM. The following issues found are still open and unresolved: the PN Waste Storage Tank was missing Subpart BB tags and the job descriptions for the personnel managing hazardous waste were not available for review.

## **10) Findings**

Upon arriving at the Ascend Performance Materials LLC facility, the inspectors signed in at the security desk and watched the safety video before being escorted to the Environmental Office. Steven French, Plant Manager; Angela Jenkins, Environmental, Safety, Security and Health Site Leader; Bob Burke, Senior Environmental Engineer; Dale Borscht, Vice President of Safety and Environmental; and Allison Bouchillon, Unit Utilities Chief and Operations Production Area were with the inspectors for an opening conference before being escorted around the facility. The inspectors presented their credentials to Mr. Burke at 9:50 a.m. CDT.

At the opening conference, a brief explanation for the purpose of the inspection was given, as well as an introduction of the ADEM and EPA inspectors. The inspectors requested a description of the facility operations. The inspectors then performed a walk-through inspection of specific areas in the facility. Below is a description of the observations made during the walk-through.

### **10.1 Hazardous Waste Tank**

The inspection team signed in to the production area for the hazardous waste tank at 11:35 a.m. CDT. The 325,000-gallon hazardous waste tank is located in a tank farm along with three product tanks (Pictures 1-2). The hazardous waste tank contained organic liquid generated from the AN manufacturing process, also known as propionitrile waste or "PN Waste." Based on information provided to the EPA during the inspection, it appears that Ascend is subject to ADEM Admin. Code r. 335-14-6-.28 [40 C.F.R. 265 Subpart BB Air Emissions Standards for Equipment Leaks] and ADEM Admin. Code r. 335-14-6-.29 [40 C.F.R. 265 Subpart CC Air Emissions Standards for Tanks, Surface Impoundments, and Containers], as they are incorporated by ADEM Admin. Code r. 335-14-3-.03(5)(a)1.(ii) [40 C.F.R. § 262.34(a)(1)(ii)], conditions of the LQG Permit Exemption.

The inspectors walked the PN Waste piping located outside and inside the secondary containment area (Pictures 3-14, 19). At the time of the inspection, the inspectors observed the tank piping was not consistently marked on each piece of equipment or the tag wire was in place but the tag was

missing (Pictures 7-11, 12-14). A flow meter was noted with the insulation removed and without Subpart BB tag (Picture 5). When the inspectors asked Mr. Burke about this, he stated that the connection did not require marking with a tag because it was normally covered in insulation. The inspectors also noted that leak detection and repair (LDAR) tags for tank pumps were located on the electrical piping instead of the tank piping (Picture 11).

Concurrently, Mr. Art Masters and Mr. Mike Neill, US EPA Region 4 SESD, monitored the piping entering and exiting the hazardous waste tank as well as the piping on the roof of the tank to detect for leaks/emissions into the air using a Toxic Vapor Analyzer (TVA) and Forward Looking Infrared (FLIR) Camera.

The inspectors observed that the bottom of the hazardous waste tank had 18 ports open to the secondary containment area (Picture 15). Mr. Burke explained there was an additional secondary containment area inside the tank and it captured any leaks from the tank and released them to the secondary containment area surrounding the tank. No releases from the ports were observed at the time of the inspection. The inspectors also noted that the open ports were not marked or tagged for LDAR. The secondary containment floor had minor chipping in random locations, but otherwise appeared to be intact and sealed.

Mr. Parvez Mallick, EPA inspector, accompanied Ms. Jenkins to the top of tank and observed the piping (Pictures 16-17). Tags were noted on the manhole cover and two connectors only.

Hazardous waste tank signage was visible in the front of the tank only (Pictures 18, 20). The facility also tracked the start accumulation date on the signage. It was explained that 6% capacity in the tank was considered one railcar. At the time of the inspection, the tank had been fully pumped out on October 10, 2016.

During the inspection, the EPA and ADEM inspectors explained to Mr. Burke and Ms. Jenkins that 60 C.F.R. Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry covered in the Ascend Title V Operating Permit only requires tagging if there is a leak, where 40 C.F.R. 265 Subpart BB requires physical tagging at all times. The inspectors also explained because of the overlap of organic air emission regulation for the hazardous waste tank and its associated piping that Subpart BB supersedes Subpart VV in stringency, so that the requirements not covered under the Title V Operating Permit are covered in the RCRA Subpart BB regulations.

## **10.2 PN Refine/ Tails Column**

The inspectors followed the hazardous waste piping back to the point of generation, which is the PN refiner tails column (Pictures 21-34). At the time of the inspection, the area was closed for maintenance, but the inspectors were allowed to examine the hazardous waste piping and connections. A LDAR tag was tucked into the insulation around one valve (Picture 25, 27-29), and a valve directly overhead did not have a LDAR tag at all (Picture 26).

The PN refiner tails piping further overhead (Pictures 31-32) had the insulation removed from around the flanges, exposing the connection and revealed the missing LDAR tag (Picture 30). Hazardous waste piping with the faded lettering "PN Tails to RCRA" had the insulation removed for maintenance. The flange connecting the piping did not have a LDAR tag attached.

The inspectors continued following the hazardous waste tank piping back to the tank. The remaining piping was observed to be insulated and no connections were visible that required LDAR tags.

Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(a)1.(ii) [40 C.F.R. § 262.34(a)(1)(ii)], which incorporates ADEM Admin. Code r. 335-14-6-.28 [40 C.F.R. Part 265, Subpart BB], and is a condition of the LQG Permit Exemption, a facility that manages hazardous waste with an organic concentrations of at least 10% by weight, in equipment, such as valves, pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, flanges, and any control devices or systems, must comply with the RCRA Subpart BB Organic Air Emission Standards for Equipment Leaks, including, but not limited to, the recordkeeping requirements of ADEM Admin. Code r. 335-14-6-.28(15) [40 C.F.R. 265.1064].

### **10.3 Extraction Feed Recovery Filters - Satellite Accumulation Area (SAA)**

The Extraction Feed Recovery Area contained one 55-gallon drum inside a concrete berm. The drum is used to collect used AN, ADN and PN filter bags (Pictures 35-36). At the time of the inspection the drum cover was open. During the inspection, facility personnel adjusted and closed the drum.

The inspectors also noted that the facility used internal labels to identify waste, however the EPA Waste Code was not listed on the label. The inspectors recommended adding the word "Used" to the waste description to distinguish the drum from the new filter container being stored in the area, and adding the EPA Waste Code to the label. During the inspection, facility personnel corrected the labeling of the drum.

Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(c)1.(i) [40 C.F.R. § 262.34(c)(1)(i)], which incorporates ADEM Admin. Code r. 335-14-6-.09(4)(a) [40 C.F.R. § 265.173(a)], and is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed when waste is not being added or removed.

Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(c)1.(ii) [40 C.F.R. § 262.34(c)(1)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark satellite accumulation containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

### **10.4 Spot 12 411 Rail Car Unloading**

The Ascend personnel explained that once the hazardous waste tank reaches a volume to fill a railcar to capacity, the tank is pumped into the Rail Car Unloading Area. At the time of the inspection, the hazardous waste tank piping was disconnected from the unloading line and the Extraction Feed Recovery Tank was connected using a hose (Pictures 37-40). The Ascend personnel explained that the high boiler material, which is tar like, was killing the reboiler and thus the material was no longer good for use. The high boiler material was being pumped from the Extraction Feed Recovery Tank and shipped out as hazardous waste.

The inspectors observed that the hazardous waste tank piping was labeled "Waste" and marked with LDAR tags. However, the LDAR tags had been removed from the hazardous waste tank connection and was not observed on the hose connecting the Extraction Feed Recovery Tank.

The inspectors observed the hazardous waste piping that was directly connected to the railcar (Pictures 41-46), which was labeled "PNW" and marked with LDAR tags. However, some of the flanges and valves (Pictures 42, 44), and the connection hose (Pictures 45-46) were not marked with LDAR tags.

**Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(a)1.(ii) [40 C.F.R. § 262.34(a)(1)(ii)], which incorporates ADEM Admin. Code r. 335-14-6-.28 [40 C.F.R. Part 265, Subpart BB], and is a condition of the LQG Permit Exemption, a facility that manages hazardous waste with an organic concentrations of at least 10% by weight, in equipment, such as valves, pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, flanges, and any control devices or systems, must comply with the RCRA Subpart BB Organic Air Emission Standards for Equipment Leaks, including, but not limited to, the recordkeeping requirements of ADEM Admin. Code r. 335-14-6-.28(15) [40 C.F.R. § 265.1064].**

#### **10.5 Area 402 – Less than 90 Day Hazardous Waste Storage Area**

Area 402 is designated as the container less than 90-day hazardous waste storage area (HWSA). The HWSA was divided into three sections. The first section contained two 25-cubic yard roll-offs of hazardous waste labeled with the facility's waste handling information sticker marked "NSQ Nalmet Wet Solids", D006, and a separate hazardous waste label marked with the facility information and the start accumulation date (Pictures 49-50). At the time of the inspection, only one container was in use and the inspectors observed that the separate hazardous waste label did not contain the EPA Waste Code. The Ascend personnel then added the EPA Waste Code to the hazardous waste label.

The second section contained 27 55-gallon drums of Edge Strips AG6844, a 55-gallon drum of aerosol cans and a 55-gallon drum of diesel fuel with water with the facility waste handling information sticker and a hazardous waste label (Pictures 47, 53-54). The inspectors observed that the drums were closed, the hazardous waste labels contained the facility information, the start accumulation date but did not have the EPA Waste Codes.

**Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(a)3., a generator is required to label or clearly mark each container and tank accumulating hazardous waste on-site with the words: "Hazardous Waste" and the EPA hazardous waste number.**

The third section contained 26 55-gallon drums of non-hazardous EHD Package Waste E69I43 and a 55-gallon drum of diesel fuel cleanup (Pictures 48, 51-52). The drums were observed closed and labeled.

The HWSA had a secondary containment grate running along the length of the area (Pictures 55-56). The grate was observed to be clean and empty.

#### **10.6 Cadmium Sludge Hopper**

The inspectors were told that the cadmium sludge generated from the ADN synthesis was collected in a metal hopper prior to being placed in the Less than 90-Day Hazardous Waste Storage Area (HWSA) roll-offs. The cadmium sludge generation point was located outside of the HWSA berm where the roll-offs are kept. The cadmium sludge is generated during a shift and takes one to four hours to fill the metal hopper. Then the hopper is weighed before it is moved to the HWSA roll-offs, where the cadmium sludge is placed inside.

The inspectors stated if the hopper stored the cadmium sludge waste longer than a shift, it would be considered a less than 90-day hazardous waste storage container because its volume exceeds 55-gallons. If this situation ever occurred, the hopper would have to be enclosed, labeled and have a start accumulation date. However, if the facility is not adding or removing waste, the hopper needs to be kept closed.

At the time of the inspection, the hopper was empty but was not marked "Hazardous Waste" or with the contents of the hopper to indicate its specific use (Pictures 57-58). The Ascend personnel labeled the hopper during the inspection.

### **10.7 Chemistry Laboratory**

The Chemistry Laboratory personnel conduct quality assurance/control assessments and pilot ADN synthesis studies. The inspectors were escorted to the lab's outside hazardous waste SAA, which was housed in a shed. The shed had sliding metal doors enclosing a bermed area. Two white 55-gallon drums of hazardous waste were observed in this area (Picture 59). The first drum contained used gas chromatography (GC) vials. The drum was labeled with D001 and F003, and was closed. The second drum was connected to the fume hood piping and a filter, and contained the lab extraction waste. This drum was labeled D001, D022, F002, and F003. Both drums were observed closed.

Inside the lab, the Lab Manager, Mrs. Luciana Vergara and the Instrument Repair and Solution Prep Technician, Mr. Darrell Eddleman, escorted the inspectors around the lab and to the interior SAAs. The fume hood for the extraction waste contained a funneled vacuum system and containers of production materials to be returned to process. The inspectors observed that the funnel used to convey the lab extraction waste, a hazardous waste, to the exterior SAA drum, was not labeled "Hazardous Waste" or with the contents of what was being conveyed (Picture 60).

**Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(c)1.(ii) [40 C.F.R. § 262.34(c)(1)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark satellite accumulation containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.**

During the lab walk through the inspectors observed two 5-gallon containers for the collection of the used GC vials (Pictures 61-62), a black 55-gallon drum of used syringes and needles in the chemical storage room (Picture 63) and eleven used sharps containers ranging in size from 3.3 quarts to 6.9 quarts (Picture 64). All of these wastes were hazardous wastes. The inspectors observed the drums to be labeled as hazardous waste, but the sharps containers were not labeled. The Ascend personnel explained that the used sharps containers were emptied into the sharps drum because the materials handled in the lab were considered hazardous waste. The inspectors stated that the used sharps containers should be labeled as hazardous waste. In addition, the containers were not consistently kept closed. The Ascend personnel proposed to use the larger container to collect the used sharps in the future.

**Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(c)1.(i) [40 C.F.R. § 262.34(c)(1)(i)], which incorporates ADEM Admin. Code r. 335-14-6-.09(4)(a) [40 C.F.R. § 265.173(a)], and is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed when waste is not being added or removed.**

**Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(c)1.(ii) [40 C.F.R. § 262.34(c)(1)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark satellite accumulation containers either with the words “Hazardous Waste” or with other words that identify the contents of the containers.**

#### **10.8 Central Maintenance Shop**

The inspectors toured the Central Maintenance Shop and observed a 55-gallon used oil drum on secondary containment pallet (Pictures 65-66). The inspectors observed that the inside of the pallet contained oil. When asked, the Ascend personnel stated the containment was cleaned out annually. The drum was observed labeled and closed.

A non-hazardous waste parts washer (Picture 67) was observed near the back of the area. The unit was not running during the inspection, but Mr. Tim Looney, Pump Shop Mechanic, stated that the rinse water from the parts washer were pumped into drums and taken to the HWSA. On the side of the parts washer was an oil skimmer. The oil from the skimmer is discarded as used oil, but the skimmer was not labeled as “Used Oil” (Picture 68).

**Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(c)1. [40 C.F.R. § 279.22(c)(1)], containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words “Used Oil.”**

Two additional SAAs were observed in the shop. A black 55-gallon drum of used aerosol cans (Picture 69) and a black 55-gallon drum of crushed bulbs with a bulb crushing unit on top (Pictures 70-71) were observed closed and labeled.

#### **10.9 No. 2 Warehouse**

The No. 2 Warehouse stores the universal waste lamps and batteries (Pictures 72-79). The inspectors observed the following:

- An empty black bin for nickel-cadmium batteries;
- A black bin for lithium batteries dated October 18, 2016;
- A black bin for alkaline batteries;
- An empty blue 30-gallon drum for miscellaneous mercury bulbs dated October 14, 2016;
- A pallet with spent lead acid batteries did not have a start accumulation date on the label. The Ascend personnel marked the batteries as October 19, 2016. However, the inspectors stated that date should be when the batteries were placed on the pallet not the day of the inspection.
- Two black 55-gallon drums of used ballasts. The first drum contained non-PCB ballasts and the second drum contained PCB ballasts dated for out of service on June 10, 2016.
- A Gaylord box of damaged batteries dated September 13, 2016 and the EPA Waste Code D002. However, the damaged batteries contained lead and the EPA Waste Code D008 was not included on the label. The Ascend personnel added the waste code to the label.
- A blue 30-gallon drum for miscellaneous mercury bulbs dated January 28, 2016.

Unless otherwise noted, the containers were observed labeled, closed, and dated.

**Pursuant to ADEM Admin. Code r. 335-14-11-.03(6)(a) and (c) [40 C.F.R. § 273.15(a) and (c)], a small quantity handler of universal waste (SQHUW) may accumulate universal waste no**



longer than one year and must to be able to demonstrate the length of time that the universal waste has accumulated from the date that it became a waste or was received.

Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(a)3., a generator is required to label or clearly mark each container and tank accumulating hazardous waste on-site with the words: "Hazardous Waste" and the EPA hazardous waste number.

#### **10.10 Used Oil Tank**

A 2,000-gallon used oil tank was located near the hazardous waste tank (Picture 80). The used oil tank was observed closed, labeled and inside a clean secondary containment. A safety shower inspected on October 17, 2016 was located near the tank. No issues were noted.

#### **Records Review**

After the walkthrough, the inspectors requested the training records, the RCRA contingency plan, tank inspections, leak detection and repair records, inspection logs and the 2014-2016 hazardous, non-hazardous, used oil and the universal waste manifests. The generator status notification (EPA Form 8700-12) was last updated February 16, 2016.

The training records for the following Ascend personnel handling hazardous were requested and reviewed: Kelly Dutton, Patrick Bair, Ray Halbrooks, Neal Birdwell, David Hutchens, Kevin Linderman, Colton Prater, Drew Prater, Derek Daniels, Bob Burke and Angela Jenkins. The training requirements per the job descriptions and duties did not include hazardous waste handling, generation or management for the following positions: Operations/Maintenance Coordinator, Production Supervisor, Nylon Intermediates Logistics Coordinator, and Shift Supervisor. Mr. Burke, Senior Environmental Engineer, last received hazardous waste training on December 3, 2013.

In addition, the training matrix of the job descriptions and duties compiled by Ascend had not been updated since 2010. Mr. Burke explained that all employees are required to have RCRA and universal waste training as of 2010.

Pursuant to the exemption from Section 22-30-12(b) of the AHWMMMA, Ala. Code § 22-30-12(b) [Section 3005 of RCRA, 42 U.S.C. § 6925], given in ADEM Admin. Code r. 335-14-3-.03(5)(a)4. [40 C.F.R. § 262.34(a)(4)] as referenced in ADEM Admin. Code r. 335-14-6-.02(7) [40 C.F.R. § 265.16(a)(1), (b) (c) and (d)], facility personnel must successfully complete a program of classroom instruction or on- the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part. The owner or operator must ensure that this program includes all the elements described in the document required under paragraph (d)(3) of this section.

(b) Facility personnel must successfully complete the program required in paragraph (a) of this section within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of paragraph (a) of this section.

- (c) Facility personnel must take part in an annual review of the initial training required in paragraph (a) of this section.
- (d) The owner or operator must maintain the following documents and records at the facility:
- (1) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
  - (2) A written job description for each position listed under paragraph (d)(1) of this Section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position;
  - (3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under paragraph (d)(1) of this section;
  - (4) Records that document that the training or job experience required under paragraphs (a), (b), and (c) of this section has been given to, and completed by, facility personnel.

The inspectors requested and reviewed the RCRA contingency plan, which was updated December 2015. The plan included a current emergency contact list and contact home addresses, a fire extinguisher map, an evacuation map and a list of emergency response equipment. Documentation (i.e., green return receipt cards) that copies of the contingency plan were provided to the local emergency response agencies (i.e., fire, police, hospital) was available.

The inspectors reviewed the weekly inspection records from January 2014 – October 2016 for the HWSA and hazardous waste tank. The hazardous waste tank is inspected twice daily. In the tank inspection records, the Ascend inspector noted deficiencies in the secondary containment, that it was missing coating. In the hazardous waste storage area inspection records, the last two weeks of December 2014 and the first and third weeks of July 2016 were missing inspections.

Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(a)1.(i) [40 C.F.R. § 262.34(a)(1)(i)], which incorporates 335-14-6-.09(5) [40 C.F.R. § 265.174], and is a condition of the LQG Permit Exemption, a generator is required to, at least weekly, inspect areas where containers are stored looking for leaking containers and for deterioration of containers caused by corrosion or other factors.

The leak detection and repair records were provided upon request, however, the LDAR consultant, All Source Testing, Michael DeSocio, was not available for discussion via face to face or conference call. Instead, Mr. Burke reviewed the piping schematics with Mr. Mallick.

The July 7, 2016 VOC Leak Detection and Repair Compliance Report for the Adiponitrile Process for January 1 – June 30, 2016 included the monitoring of 559 valves that was conducted from April 26 to May 2. One leaking pump and one leaking valve was detected in April 2016. The valve was repaired the same day the leak was detected and the pump was repaired within 12 days by replacing the seal. No issues were observed in the review of the LDAR report.

Hazardous and non-hazardous manifests were reviewed for 2014-2016. Hazardous wastes were transported by trucking company Robbie D Wood (EPA ID ALD067138891) and rail companies Norfolk Southern Railway (EPA ID GAD006920417) and Canadian National Railroad (EPA ID ILD0008443).

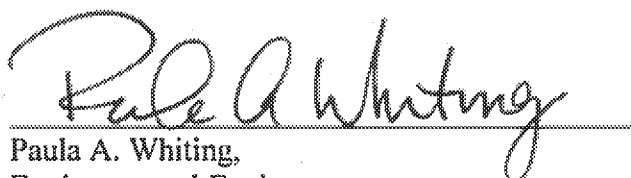
Hazardous waste was disposed of by Chemical Waste Management (EPA ID ALD000622464) in Emelle, AL; Clean Harbors Deer Park LLC (EPA ID TXD055141378) in Deer Park, TX; and ECO Services Operations LLC, (EPA ID LAD008161234) in Baton Rouge, LA. The land disposal restriction forms were reviewed and no issues were observed during the review.

Universal waste was transported and disposed of by Clean Harbors Reidsville LLC (EPA ID NCD000648451) in Reidsville, NC and Safety Kleen Systems (EPA ID TXD077603371).

#### 11) Summary


The inspectors conducted the exit meeting with Mr. Burke, Ms. Jenkins, and Mr. French. During this meeting, the EPA and ADEM presented the preliminary results of the inspection. Ascend was inspected as a large quantity generator of hazardous waste. At the time of the inspection, Ascend did not appear to be in compliance with some requirements of RCRA.

#### 12) Signed

  
Paula A. Whiting,  
Environmental Engineer

3/1/17  
Date

#### Concurrence

  
Alan A. Annicella, Chief  
Hazardous Waste Enforcement and Compliance Section  
Enforcement and Compliance Branch  
Resource Conservation and Restoration Division

3/1/17  
Date

**ATTACHMENT A**

**ASCEND PERFORMANCE MATERIALS LLC**

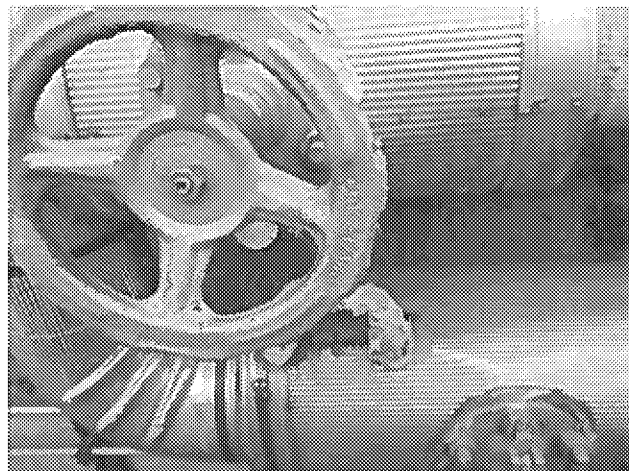
**DECATUR, ALABAMA**

**COMPLIANCE EVALUATION INSPECTION PHOTOGRAPHS**

**OCTOBER 18-19, 2016**



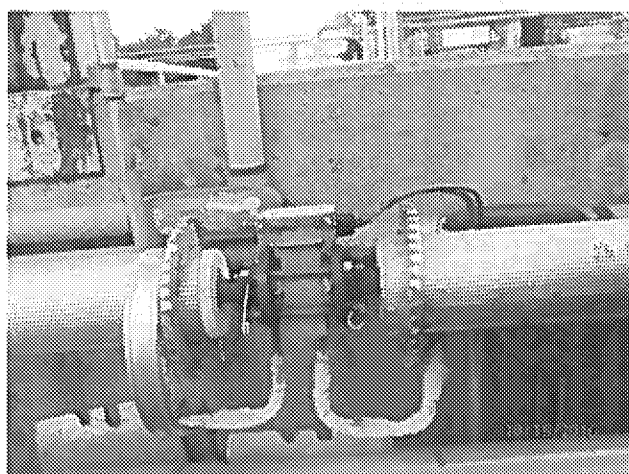
Picture 1 – PN Hazardous Waste Storage Tank



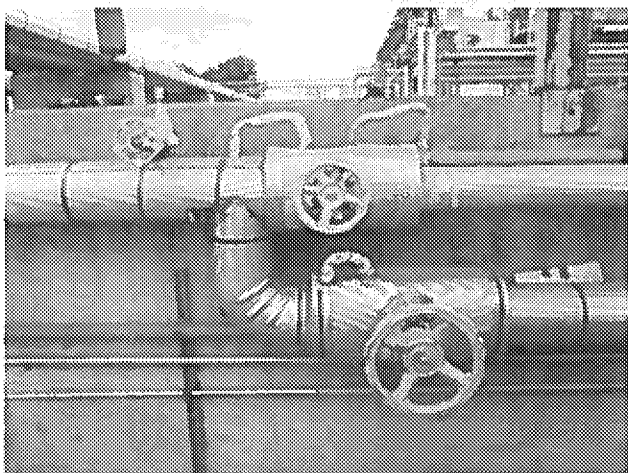
Picture 4 - PN Waste to Railcar piping with BB tags



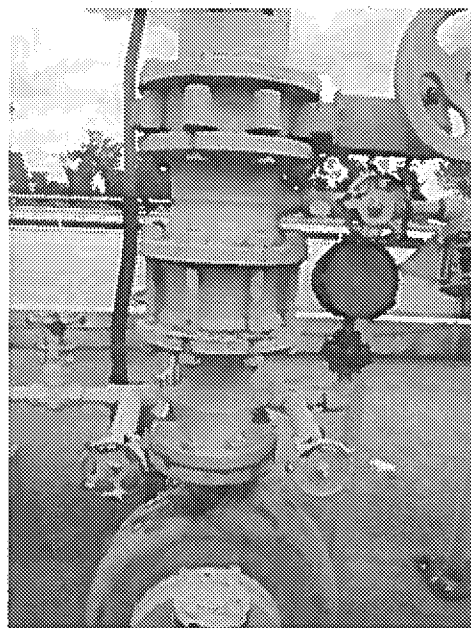
Picture 2 - PN Hazardous Waste Storage Tank



Picture 5 - PN Waste to Railcar piping with uninsulated flowmeter – no BB tag



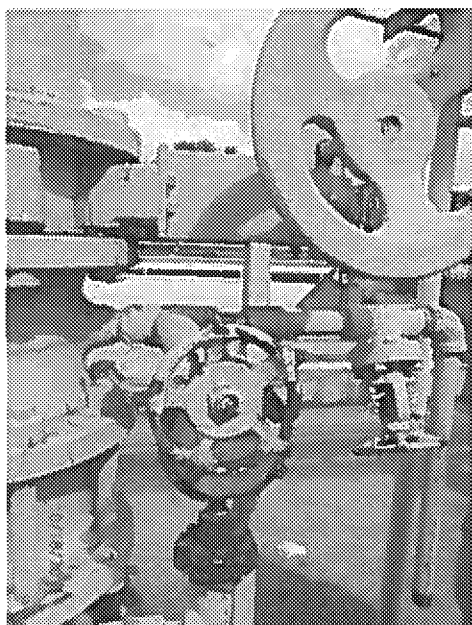
Picture 3 – PN Waste to Railcar piping with BB tags



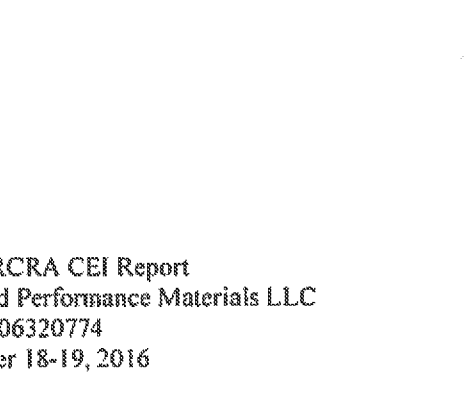
Picture 6 - PN Waste to Railcar piping with missing BB tags



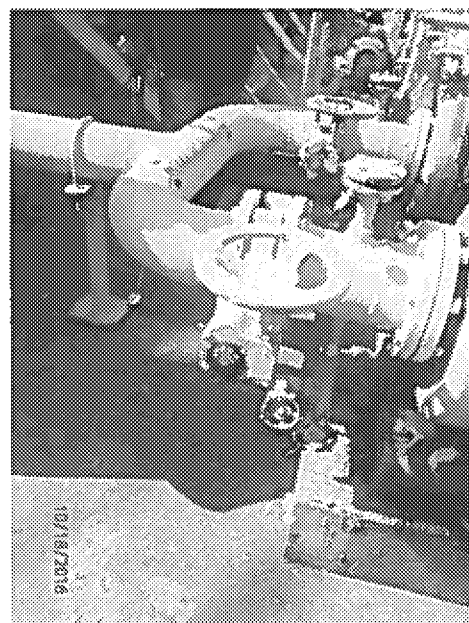
Picture 7 - PN Waste to Railcar piping with BB tag covering several connections



Picture 8 - PN Waste to Railcar piping with BB tag covering several connections



Picture 9 - PN Waste to Railcar piping with BB tag covering several connections

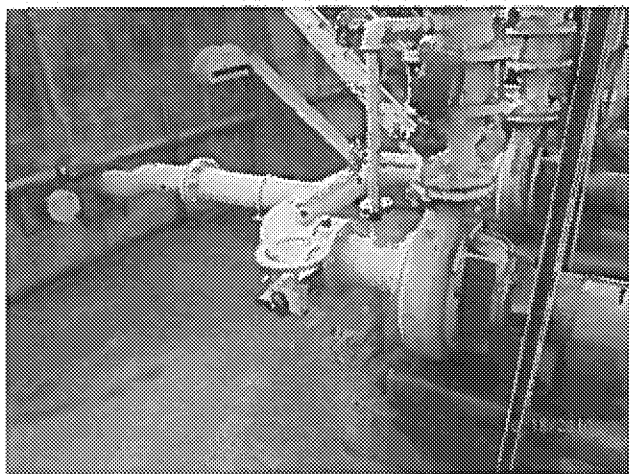


Picture 10 - PN Waste to Railcar piping with BB tag covering several connections

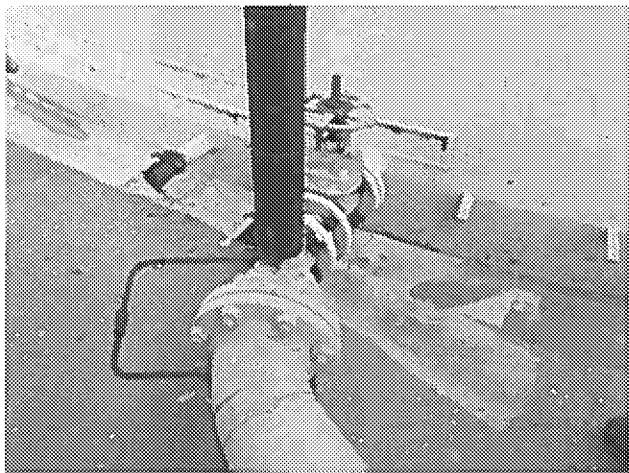




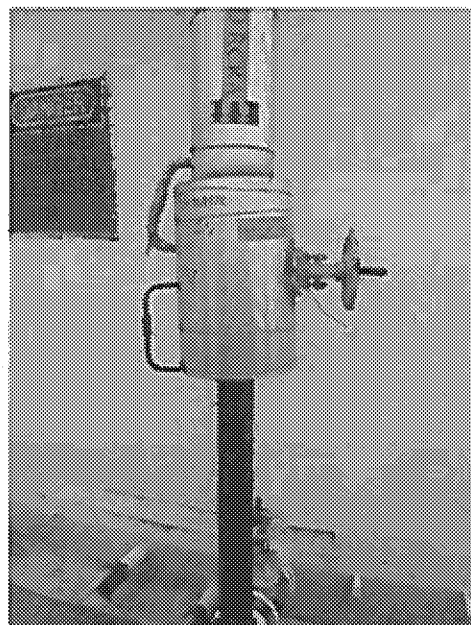
Picture 11 - PN Waste to Railcar pump BB tag on an electrical conduit



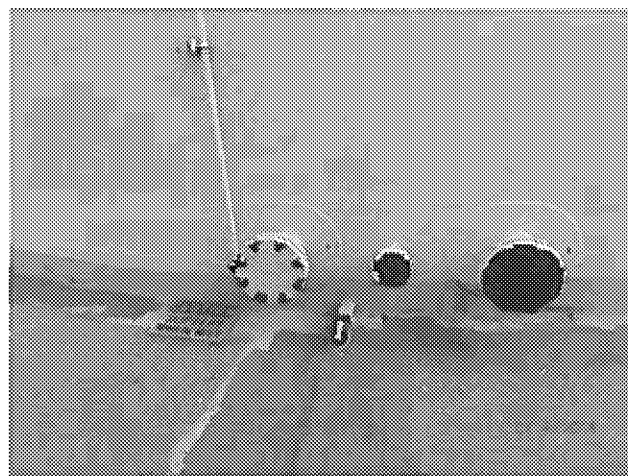
Picture 12 - PN Waste to Railcar piping with BB tag covering several connections



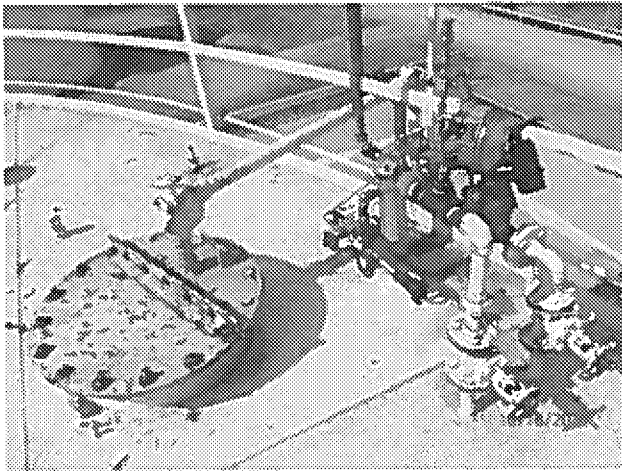
Picture 13 - PN Waste to Railcar piping with BB tag covering several connections



Picture 14 - PN Waste to RCRA piping with BB tag covering several connections



Picture 15 - PN waste tank leak ports



Picture 16 - PN waste tank top piping



Picture 17 - PN waste tank top piping



Picture 18 - PN waste tank sign and pump out date



Picture 19 - PN waste tank direct piping



Picture 20 - PN waste tank signs and pump out date

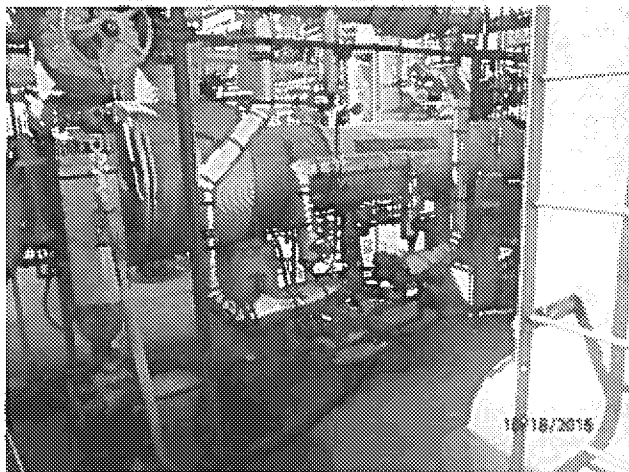




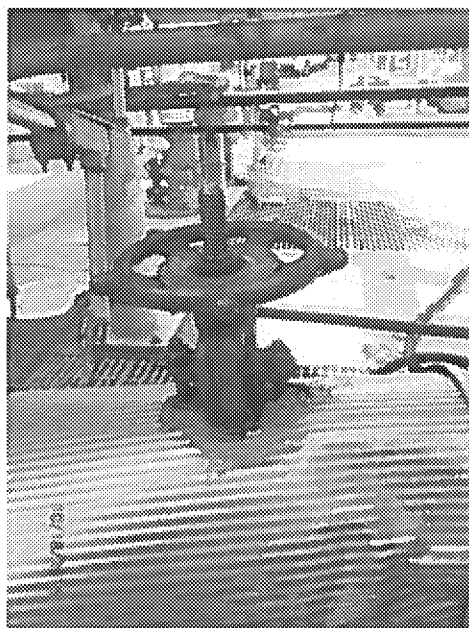
Picture 21 – PN Refiner Tails column



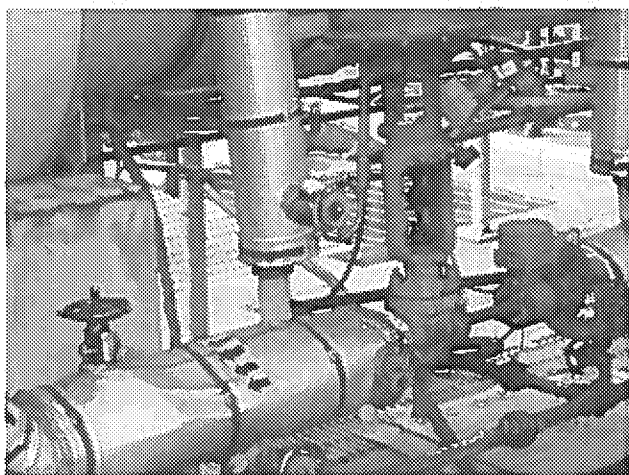
Picture 24 - PN Refiner Tails with BB tag tucked inside the insulation



Picture 22 – PN Refiner Tails piping



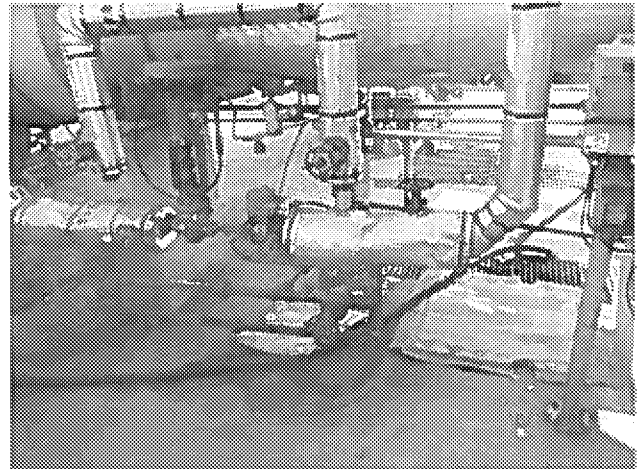
Picture 25 - PN Refiner Tails with BB tag tucked inside the insulation



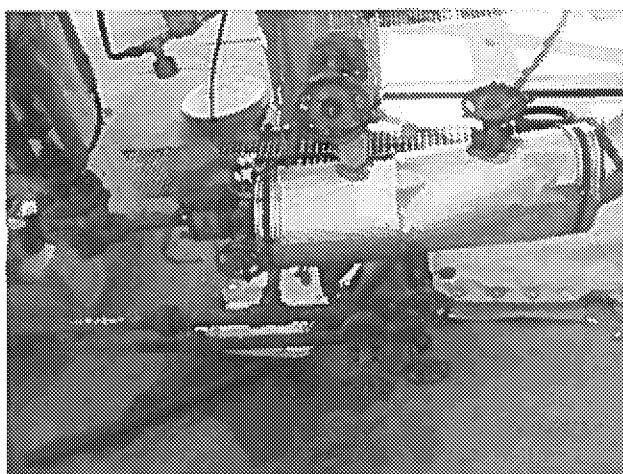
Picture 23 - PN Refiner Tails piping with BB tags



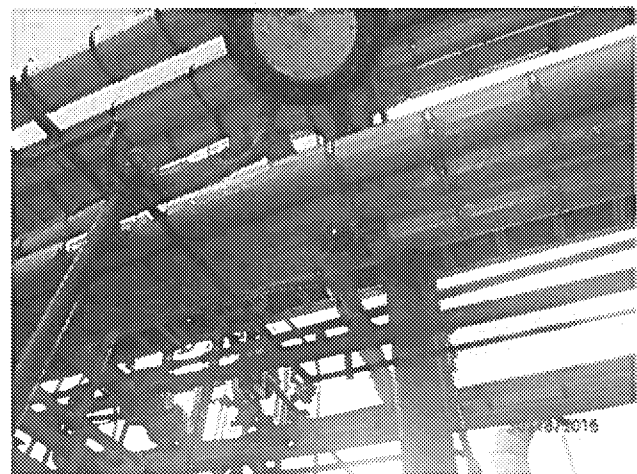
Picture 26 - PN Refiner Tails valve missing BB tag



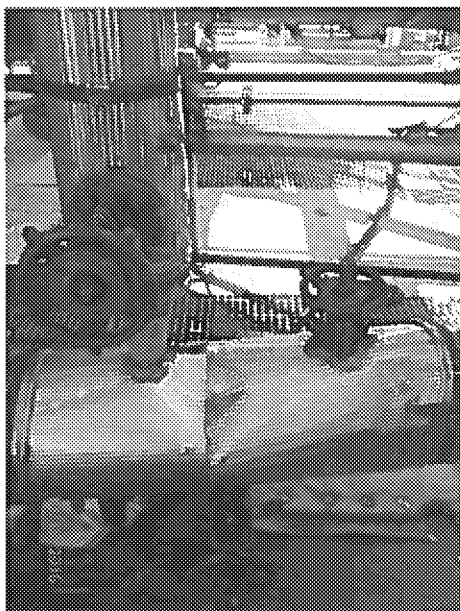
Picture 29 - PN Refiner Tails piping missing BB tags



Picture 27 - PN Refiner Tails piping missing BB tags



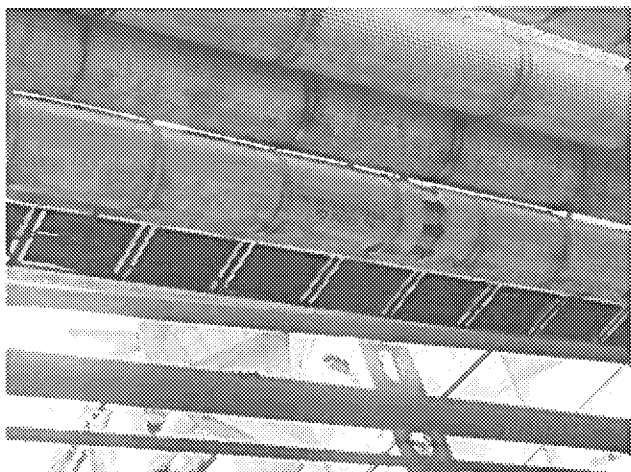
Picture 30 - PN Refiner Tails piping missing BB tags



Picture 28 - PN Refiner Tails piping missing BB tags



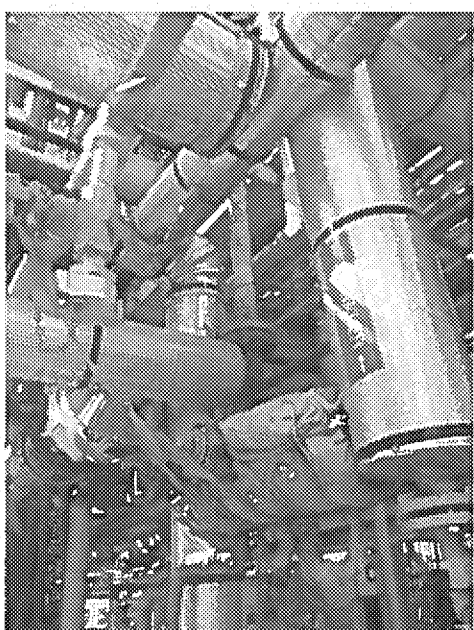
Picture 31 - PN Refiner Tails insulated piping labeled



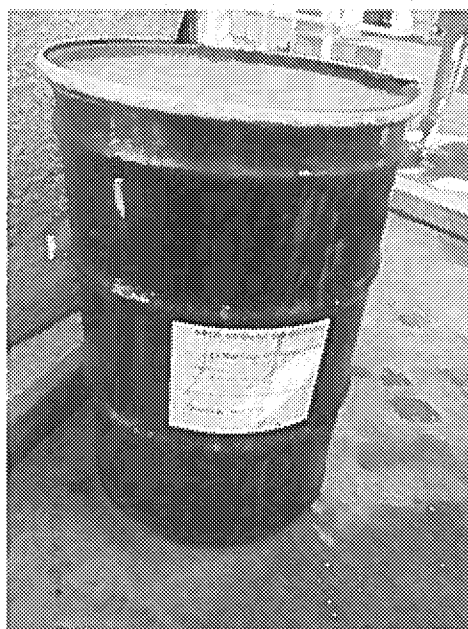
Picture 32 - PN Refiner Tails insulated piping labeled



Picture 34 - PN Refiner Tails uninsulated piping labeled and missing BB tags

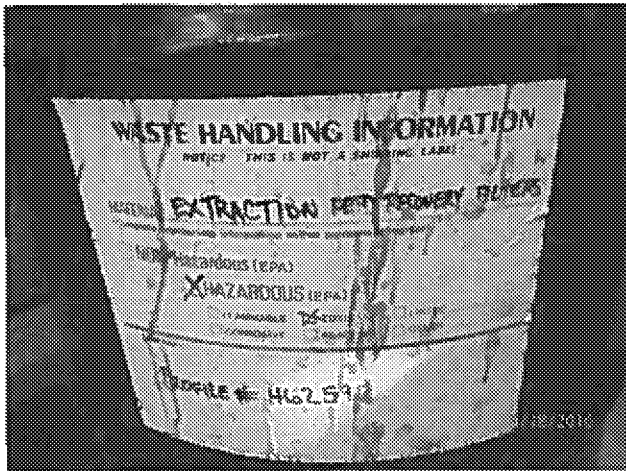


Picture 33 - PN Refiner Tails uninsulated piping labeled and missing BB tags



Picture 35 - Extraction Feed Recovery filter SAA





Picture 36 - Extraction Feed Recovery filter SAA



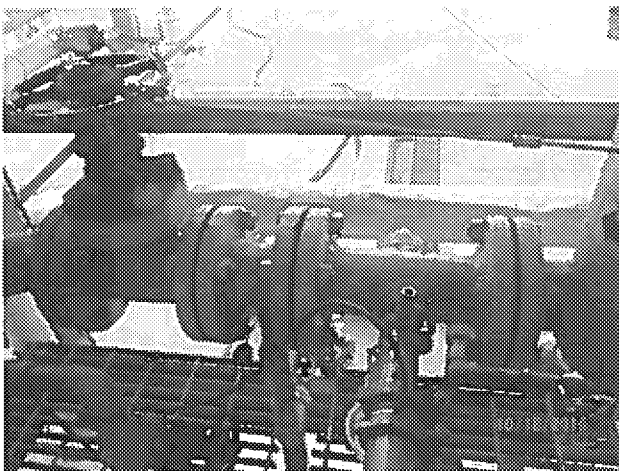
Picture 39 - Railcar unloading piping disconnected for extraction tank hose



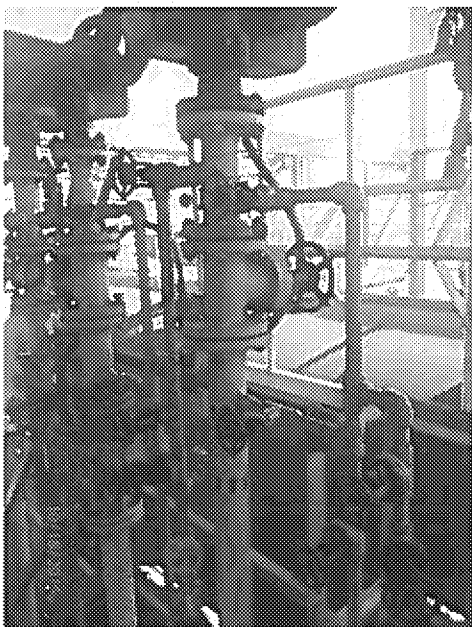
Picture 37 - Railcar unloading and extraction tank piping



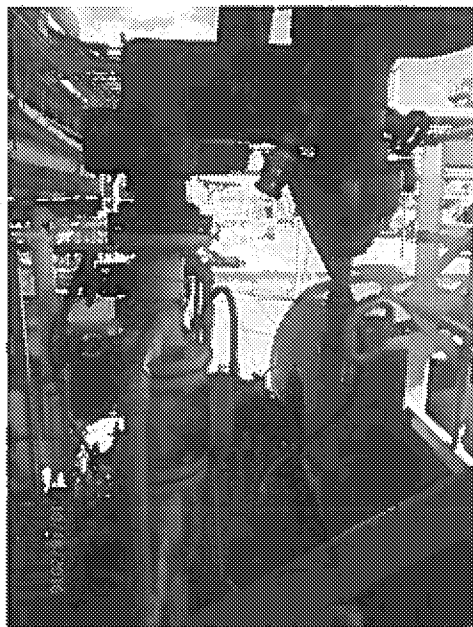
Picture 40 - Railcar unloading and extraction tank piping



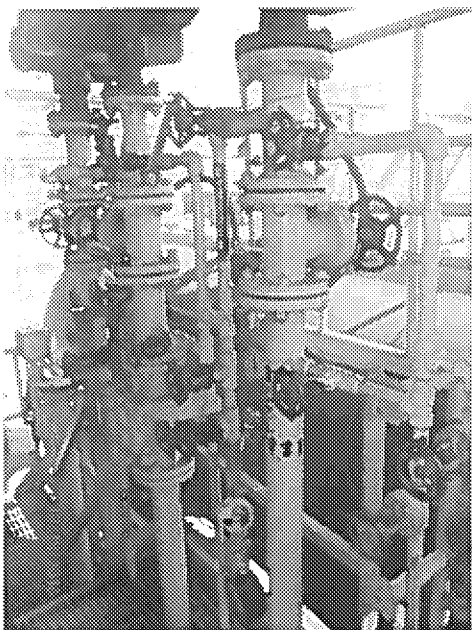
Picture 38 - Railcar unloading and extraction tank piping



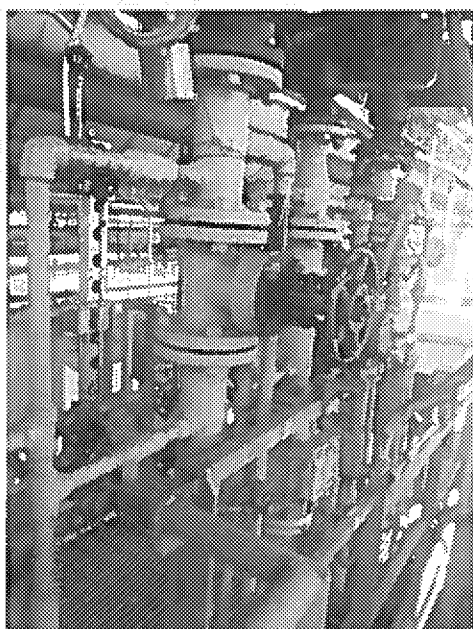
Picture 41 - Railcar unloading piping



Picture 43 - Railcar unloading piping missing BB tags at flanges and valves



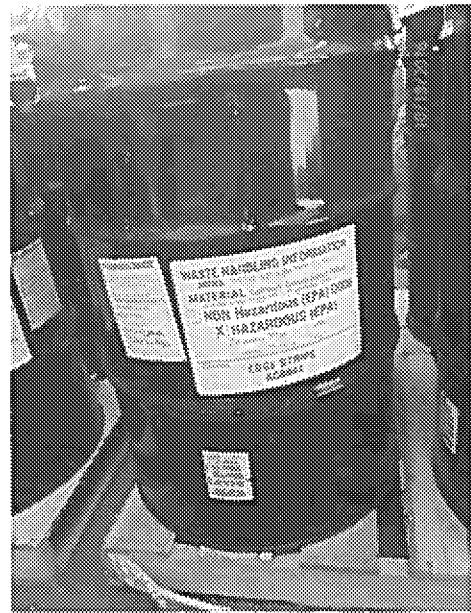
Picture 42 - Railcar unloading piping



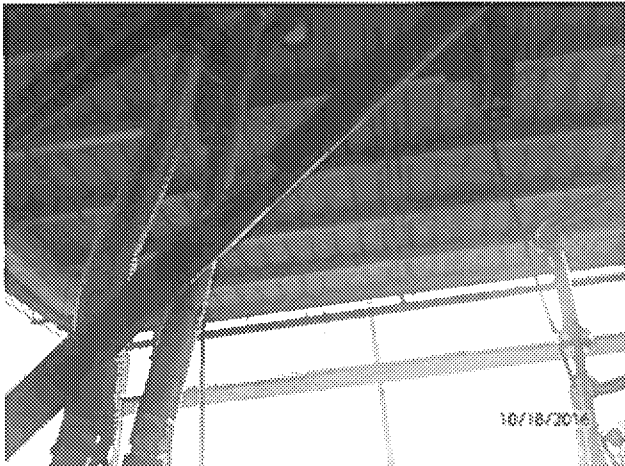
Picture 44 - Railcar unloading piping missing BB tags at flanges and valves



Picture 45 - Railcar unloading hose



Picture 47 - HWSA drum storage



Picture 46 - Railcar unloading hose



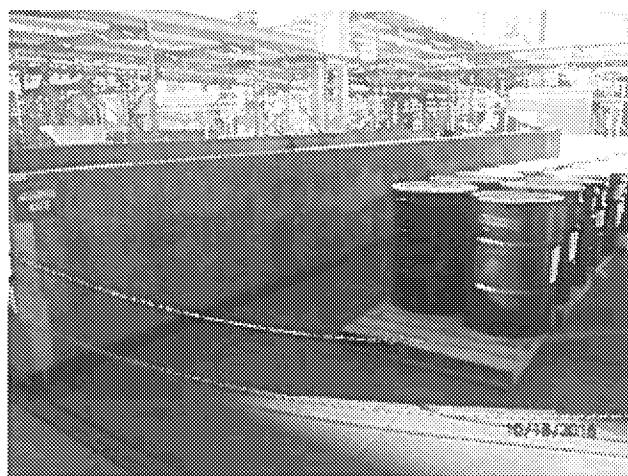
Picture 48 - HWSA non-hazardous drum storage



Picture 49 - HWSA hazardous roll-off storage



Picture 50 - HWSA hazardous roll-off storage



Picture 53 - HWSA hazardous drum storage



Picture 51 - HWSA non-hazardous drum storage

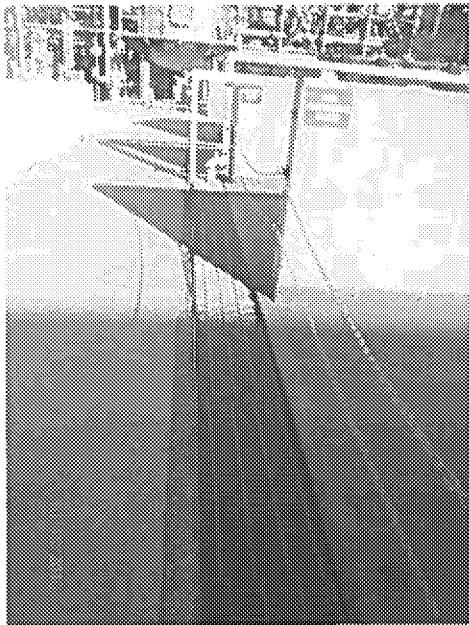


Picture 54 - HWSA hazardous drum storage

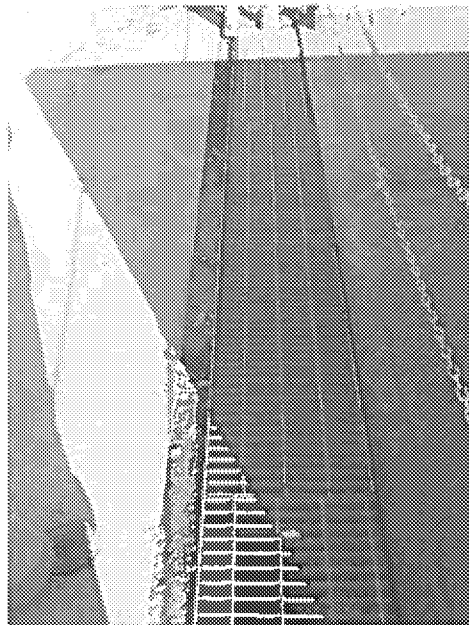


Picture 52 - HWSA non-hazardous drum storage

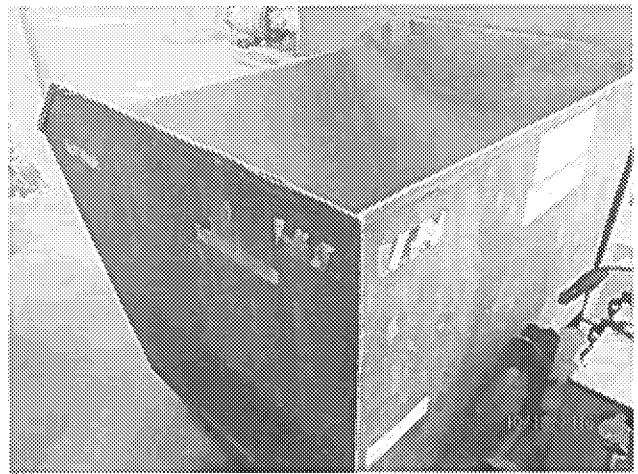




Picture 55 -- HWSA secondary containment grate



Picture 56 - HWSA secondary containment grate



Picture 57 -- Cadmium sludge hopper - unlabeled



Picture 58 - Cadmium sludge hopper - unlabeled



Picture 59 -- Lab Extraction waste and GC vials SAAs

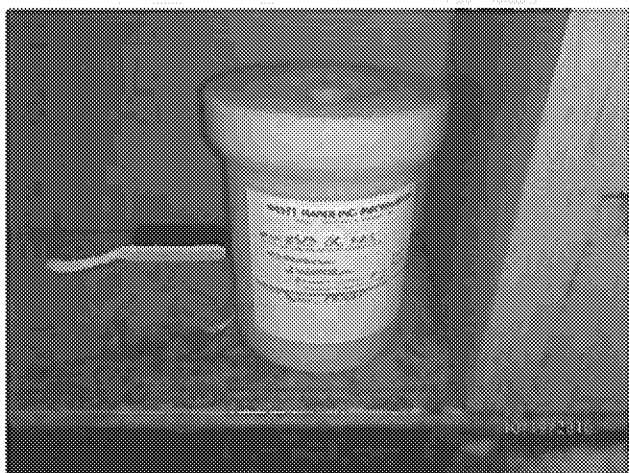




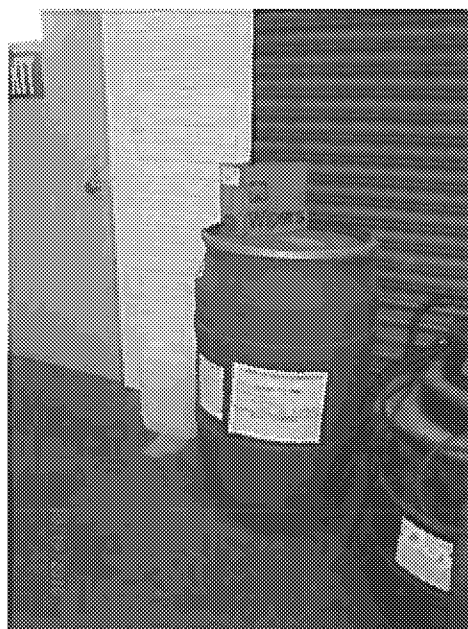
Picture 60 – Lab fume hood extraction waste vacuum funnel



Picture 61 – Lab used GC vial SAA



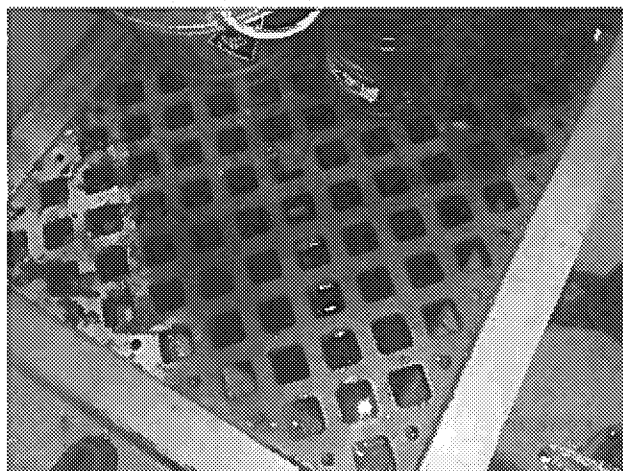
Picture 62 – Lab used GC vial SAA



Picture 63 – Lab sharps SAA in loading dock area



Picture 64 – Lab small open sharps containers



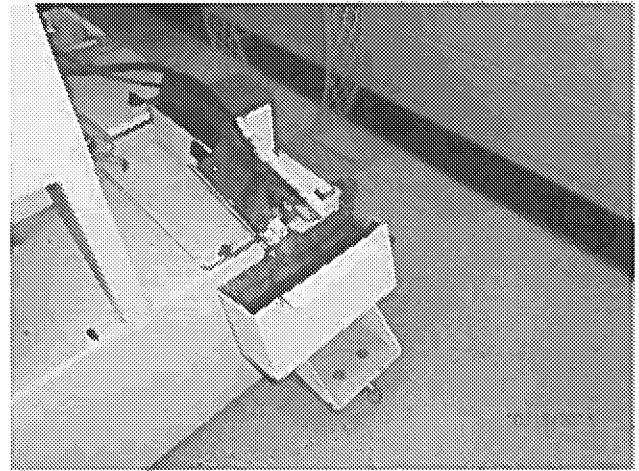
Picture 65 – Central Maintenance Shop used oil secondary containment



Picture 66 -- Central Maintenance Shop used oil drum



Picture 67 -- Central Maintenance Shop parts washer



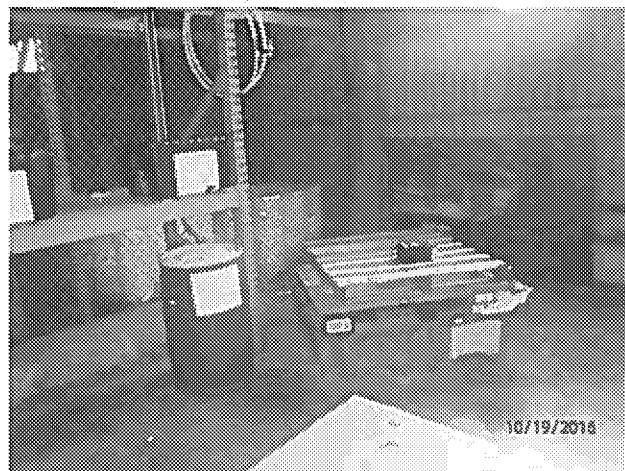
Picture 68 -- Central Maintenance Shop parts washer oil skimmer



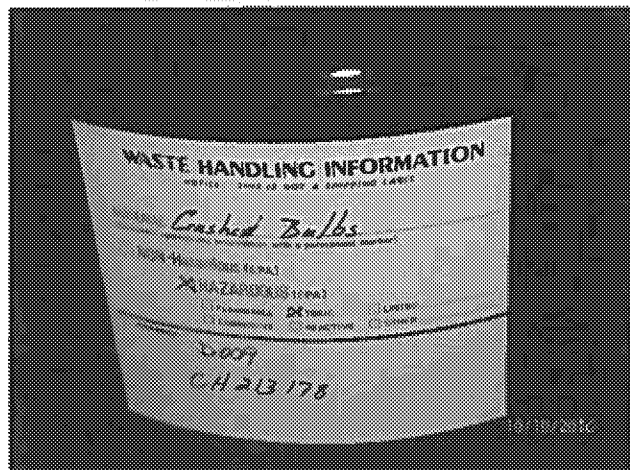
Picture 69 -- Central Maintenance Shop used aerosol drum



Picture 70 – Central Maintenance Shop bulb crusher



Picture 73 – No. 2 Warehouse UW storage



Picture 71 – Central Maintenance Shop bulb crusher



Picture 74 – No. 2 Warehouse UW storage – PCB drums

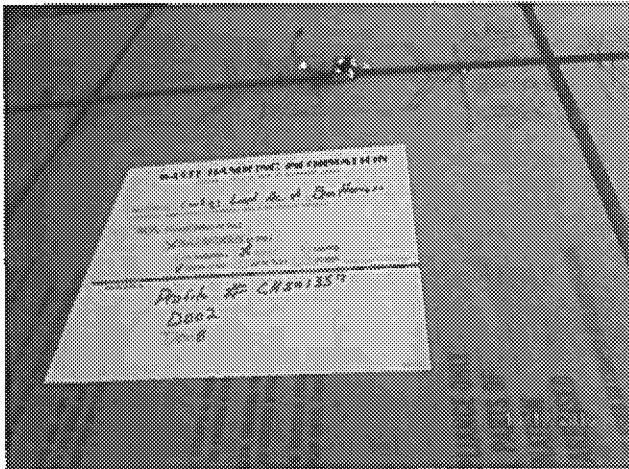


Picture 72 – No. 2 Warehouse UW storage

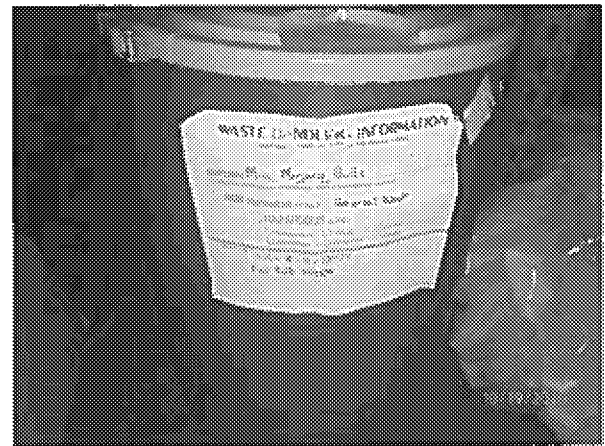


Picture 75 – No. 2 Warehouse UW storage damaged batteries

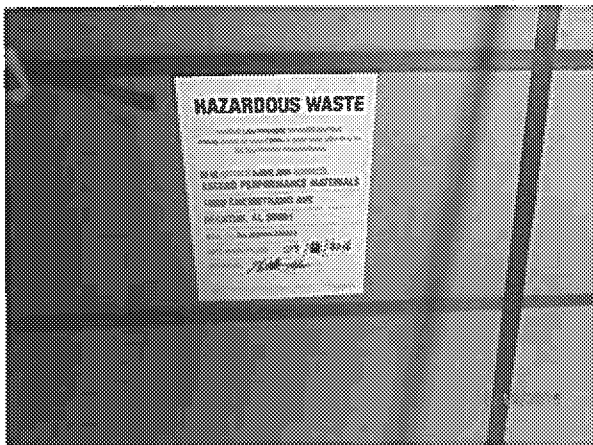




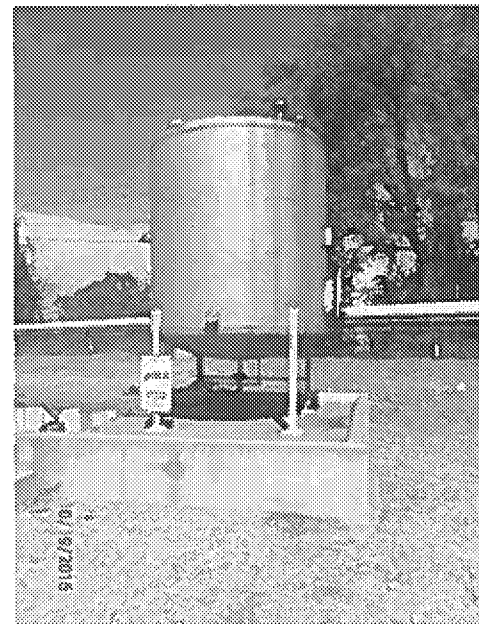
Picture 76 -- No. 2 Warehouse UW storage damaged batteries



Picture 79 -- No. 2 Warehouse UW storage - misc. mercury bulbs



Picture 77 -- No. 2 Warehouse UW storage damaged batteries



Picture 80 -- Used Oil Tank



Picture 78 -- No. 2 Warehouse UW storage - misc. mercury bulbs